

WHAT IS CLAIMED IS:

1. A drive guide apparatus having a linear motor and a guide mechanism that guides relative movement between a primary side of said linear motor, which is an energized side thereof, and a secondary side of said linear motor, which is a non-energized side thereof, and that carries a load, said guide mechanism having a rail and a moving member provided to be movable relative to said rail, the primary side of said linear motor being connected directly or indirectly to the rail or the moving member of said guide mechanism,

wherein thermal insulating means for blocking heat generated from the primary side of said linear motor is provided between said primary side and the rail or the moving member of said guide mechanism to which said primary side is connected.

2. A drive guide apparatus according to claim 1, wherein said thermal insulating means comprises a thermal insulator interposed between said rail or said moving member and said primary side.

3. A drive guide apparatus according to claim 2, wherein said thermal insulator is elongated in a direction of relative movement between said rail and said moving member.

4. A drive guide apparatus according to claim 1, wherein said thermal insulating means comprises a thermal insulating space formed between said rail or said moving member and said primary side.

5. A drive guide apparatus according to claim 4, wherein said thermal insulating space has a mirror finished surface at a side thereof closer to the rail or the moving member of said guide mechanism to which the
5 primary side of said linear motor is connected.

6. A drive guide apparatus according to any one of claims 1 to 5, wherein said rail is formed with a rolling element rolling surface extending longitudinally of said rail, and said moving member has an endless recirculation
10 passage including a load rolling element rolling passage corresponding to said rolling element rolling surface, wherein a multiplicity of rolling elements are arranged and accommodated in said endless recirculation passage so that said rolling elements recirculate while receiving a
15 load in said load rolling element rolling passage.

7. A drive guide apparatus according to any one of claims 1 to 6, wherein a heatsink that dissipates heat generated from the primary side of said linear motor is provided.

20 8. A drive guide apparatus according to claim 7, wherein said heatsink is a finned heatsink having radiating fins.

9. A drive guide apparatus having a linear motor and a guide mechanism that guides relative movement between a
25 primary side of said linear motor, which is an energized side thereof, and a secondary side of said linear motor, which is a non-energized side thereof, and that carries a load, said guide mechanism having a rail and a moving

member provided to be movable relative to said rail,

wherein the primary side of said linear motor is connected to said moving member through a heatsink, and an absorbing member is provided at a joint between said

5 primary side and said moving member, said absorbing member being adapted to absorb a deformation of said heatsink due to a thermal expansion difference between said moving member and said heatsink by shearing force deformation.

10 10. A drive guide apparatus according to claim 9, wherein said absorbing member has both a function of absorbing a deformation of said heatsink by shear deformation and a thermal insulating function of cutting off heat transfer from said heatsink to said moving member.

15 11. A drive guide apparatus according to claim 9 or 10, wherein said absorbing member is a laminated glass-epoxy resin material.